

IN THE CLAIMS:

Please cancel Claims 25-35, 42, 43, 47-56, 63 and 64 without prejudice or disclaimer of subject matter.

Please amend Claims 40, 59 and 61 as follows. All the claims currently pending in this application, including those not presently amended, have been reproduced below for the Examiner's convenience.

Claims 25-35 have been cancelled.

36. (Previously Added) An exposure apparatus comprising:

an optical system having a plurality of spaces separated by a plurality of separating portions each including an optical element and a supporting portion for supporting the optical element, wherein each of two adjacent separating portions of the plurality of separating portions has an aperture through which a gas can be transmitted, and wherein apertures of the adjacent two separating portions are disposed at rotational positions, about an optical axis of said optical system, with angles other than zero degree and 180 degrees.

37. (Previously Added) An apparatus according to Claim 36, further comprising an illumination optical system for illuminating a reticle, wherein said illumination optical system includes said optical system.

38. (Previously Added) An exposure apparatus comprising:

an optical system having a plurality of spaces separated by a plurality of separating portions each including an optical element and a supporting portion for supporting the optical element, wherein each of two adjacent separating portions of the plurality of separating portions has an aperture through which a gas can be transmitted, and wherein a straight line connecting apertures of the adjacent two separating portions is not parallel to any of optical axes of optical elements of said adjacent two separating portions and the straight line also does not intersect any of the optical axes of the optical elements of the adjacent two separating portions.

39. (Previously Added) An apparatus according to Claim 38, further comprising an illumination optical system for illuminating a reticle, wherein said illumination optical system includes said optical system.

40. (Currently Amended) An exposure apparatus comprising:

an optical system having a plurality of spaces separated by a plurality of separating portions each including an optical element and a supporting portion for supporting the optical element, wherein each of two adjacent separating portions of the plurality of separating portions has an aperture through which a gas can be transmitted, and wherein a straight line connecting apertures of the adjacent two separating portions is not contained in any of planes plane including that contains an optical axes axis of the optical elements of the adjacent two separating portions.

41. (Previously Added) An apparatus according to Claim 40, further comprising an illumination optical system for illuminating a reticle, wherein said illumination optical system includes said optical system.

Claims 42 and 43 have been cancelled.

44. (Previously Added) A device manufacturing method, comprising the steps of:  
exposing a substrate by use of an exposure apparatus as recited in Claim 36;  
and  
etching the exposed substrate.

45. (Previously Added) A device manufacturing method, comprising the steps of:  
exposing a substrate by use of an exposure apparatus as recited in Claim 38;  
and  
etching the exposed substrate.

46. (Previously Added) A device manufacturing method, comprising the steps of:  
exposing a substrate by use of an exposure apparatus as recited in Claim 40;  
and  
etching the exposed substrate.

Claims 47-56 have been cancelled.

57. (Previously Added) An exposure apparatus, comprising:  
a first separating portion for separating a first space and a second space from each other, said first separating portion having a first aperture;  
a second separating portion for separating the second space and a third space from each other, said second separating portion having a second aperture; and  
supplying means for supplying a gas to one of the first and third spaces;  
wherein a relative rotational position of said first and second apertures about an optical axis of said exposure apparatus define an angle other than zero degree and 180 degrees.

58. (Previously Added) An apparatus according to Claim 57, wherein said first separating portion includes a first transparent optical element and a first supporting portion for supporting the first transparent optical element, and wherein said second separating

portion includes a second transparent optical element and a second supporting position for supporting said second transparent optical element.

59. (Currently Amended) An exposure apparatus, comprising:  
an optical system for directing light to an object to be exposed; and  
supplying means for supplying a gas to one of a first space and a third  
space;

wherein said optical system includes (i) a first separating portion for separating the first space and a second space from each other, said first separating portion having a first aperture, and (ii) a second separating portion for separating the second space and the third space from each other, said second separating portion having a second aperture; and

wherein a straight line connecting the first aperture and the second aperture is not parallel to an optical axis of said optical system and also does not intersect the optical system axis.

60. (Previously Added) An apparatus according to Claim 59, wherein said first separating portion includes a first transparent optical element and a first supporting portion for supporting the first transparent optical element, and wherein said second separating portion includes a second transparent optical element and a second supporting portion for supporting the second transparent optical element.

61. (Currently Amended) An exposure apparatus, comprising:

an optical system for directing light to an object to be exposed; and

supplying means for supplying a gas to one of a first space and a third space;

wherein said optical system includes (i) a first separating portion for separating the first space and a second space from each other, said first separating portion having a first aperture, and (ii) a second separating portion for separating the second space and the third space from each other, said second separation portion having a second aperture; and

wherein a straight line connecting the first aperture and the second aperture is not contained in any planes plane containing that contains an optical axis of said optical system.

62. (Previously Added) An apparatus according to Claim 61, wherein said first separating portion includes a first transparent optical element and a first supporting portion for supporting the first transparent optical element, and wherein said second separating portion includes a second transparent optical element and a second supporting portion for supporting said second transparent optical element.

Claims 63 and 64 have been cancelled.

65. (Previously Added) A device manufacturing method, comprising the steps of:

performing an exposure process on a substrate by use of an exposure apparatus as recited in claim 57; and

performing an etching process to the exposed substrate.

66. (Previously Added) A device manufacturing method, comprising the steps of:

performing an exposure process on a substrate by use of an exposure apparatus as recited in claim 59; and

performing an etching process to the exposed substrate.

67. (Previously Added) A device manufacturing method, comprising the steps of:

performing an exposure process on a substrate by use of an exposure apparatus as recited in claim 61; and

performing an etching process to the exposed substrate.